

FIGURE 1

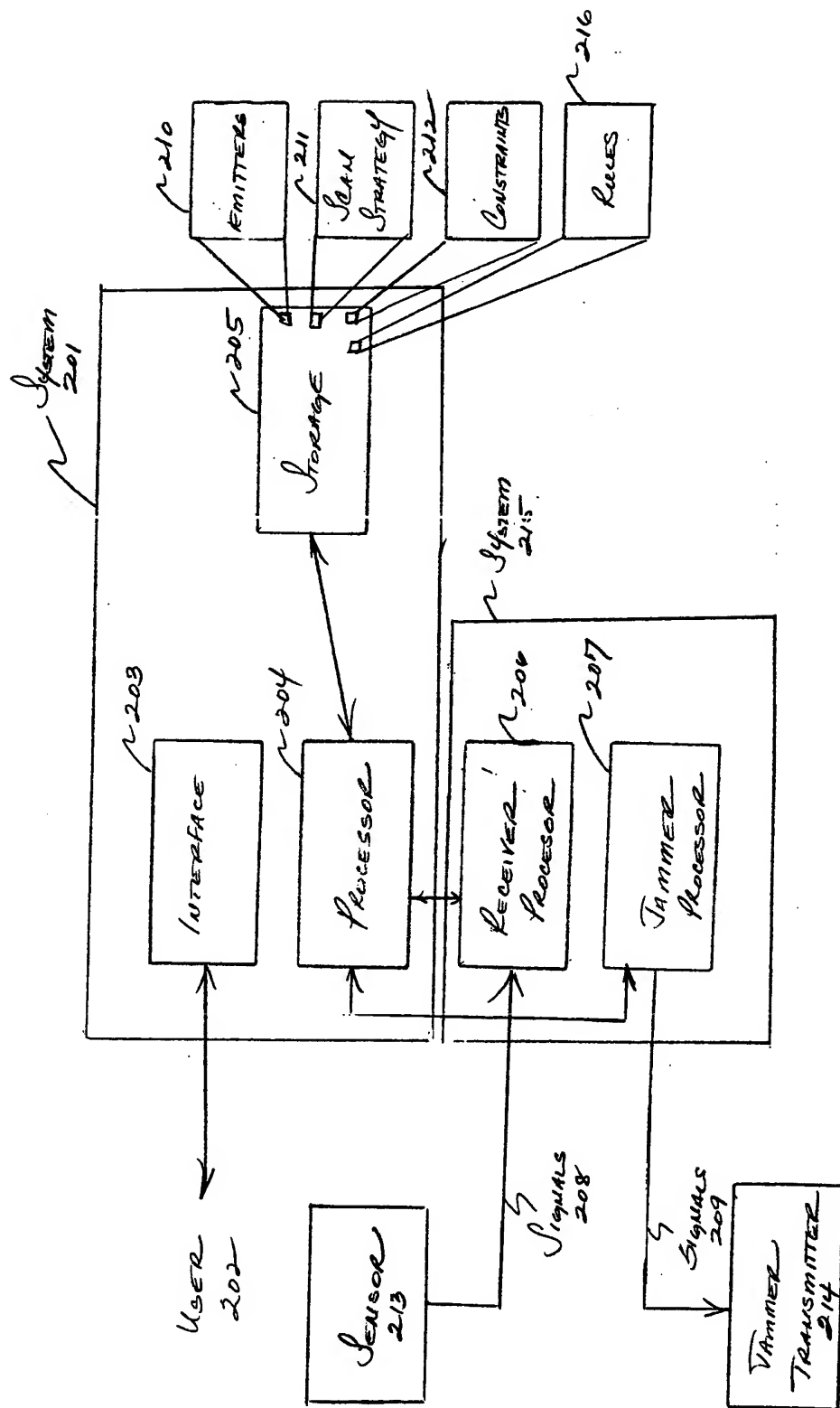
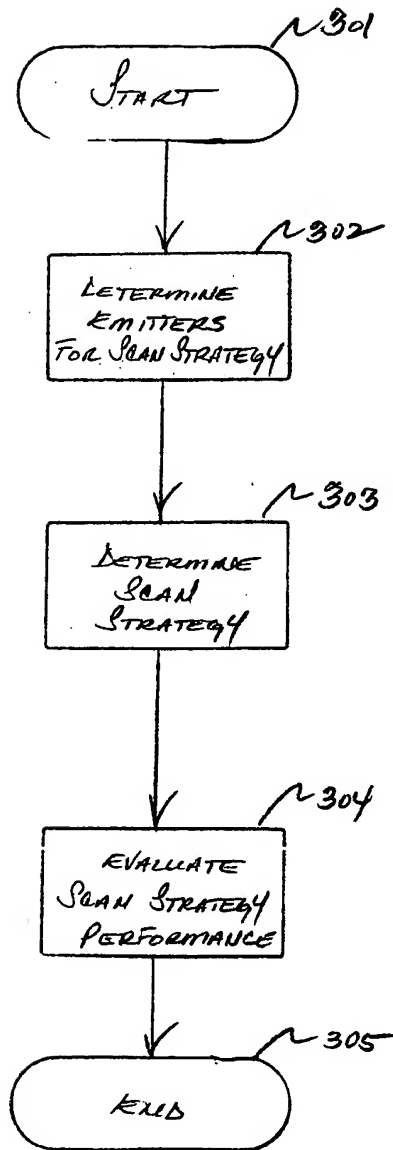
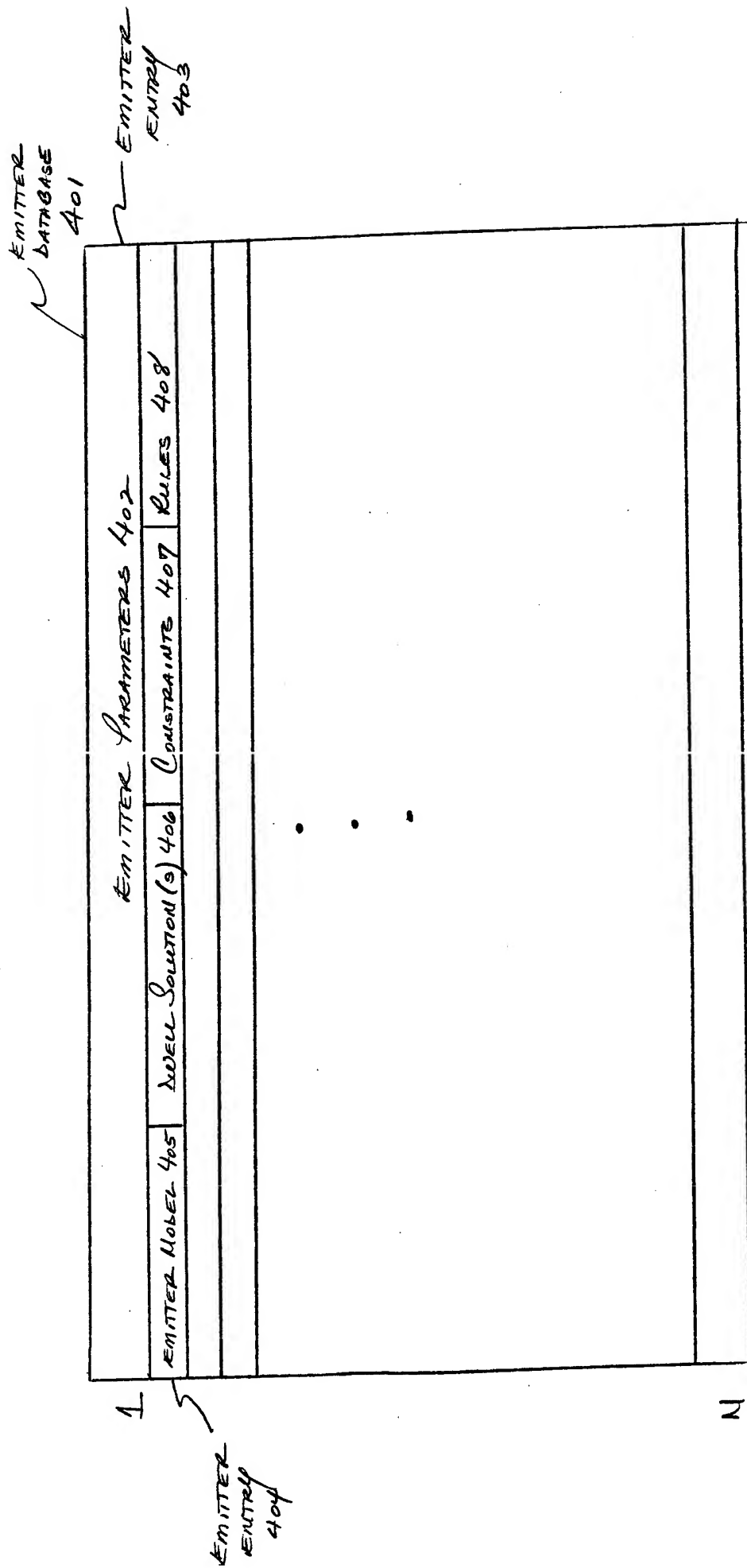


Figure 2



PROCESS
300

FIGURE 3



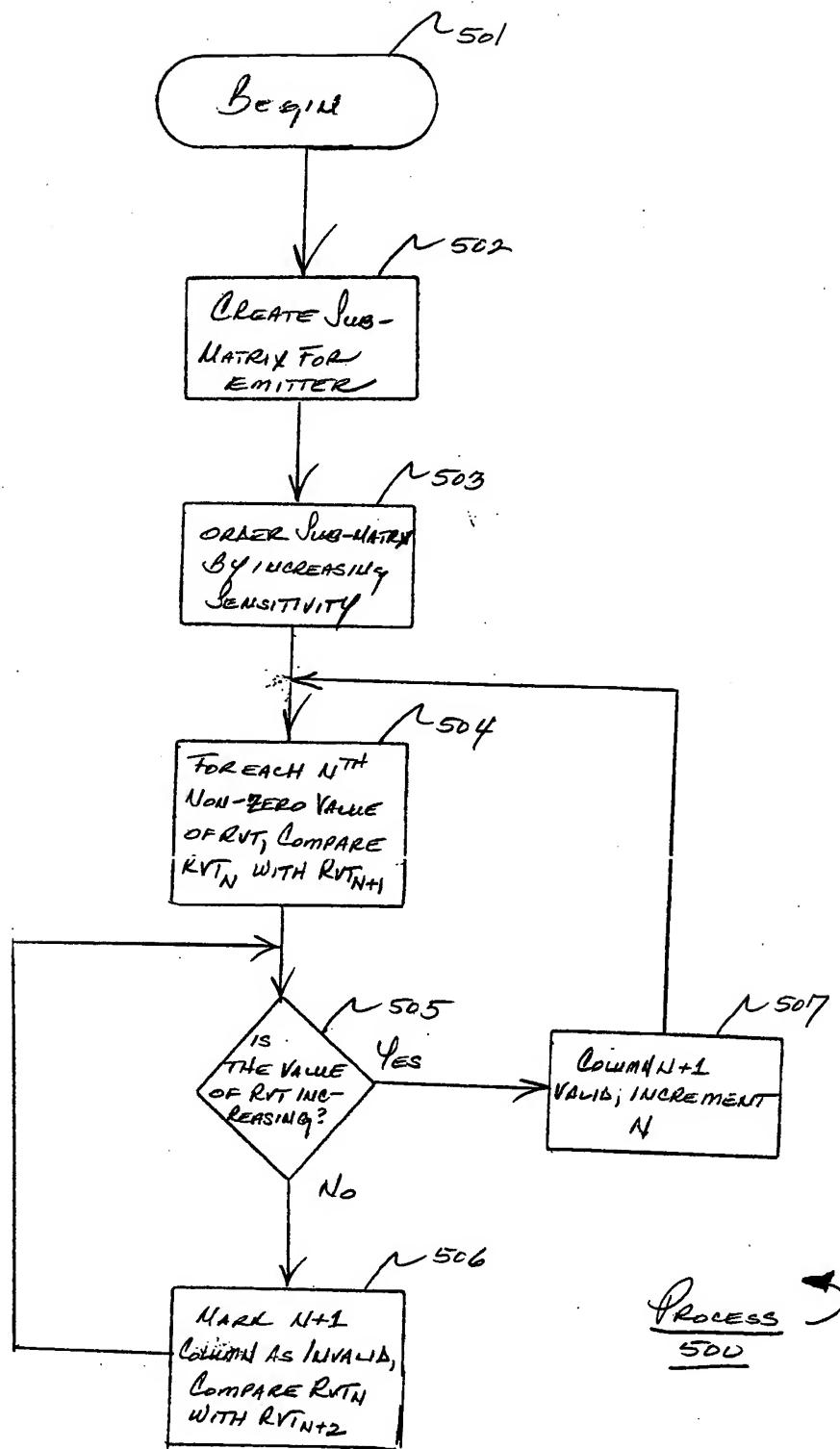


FIGURE 5

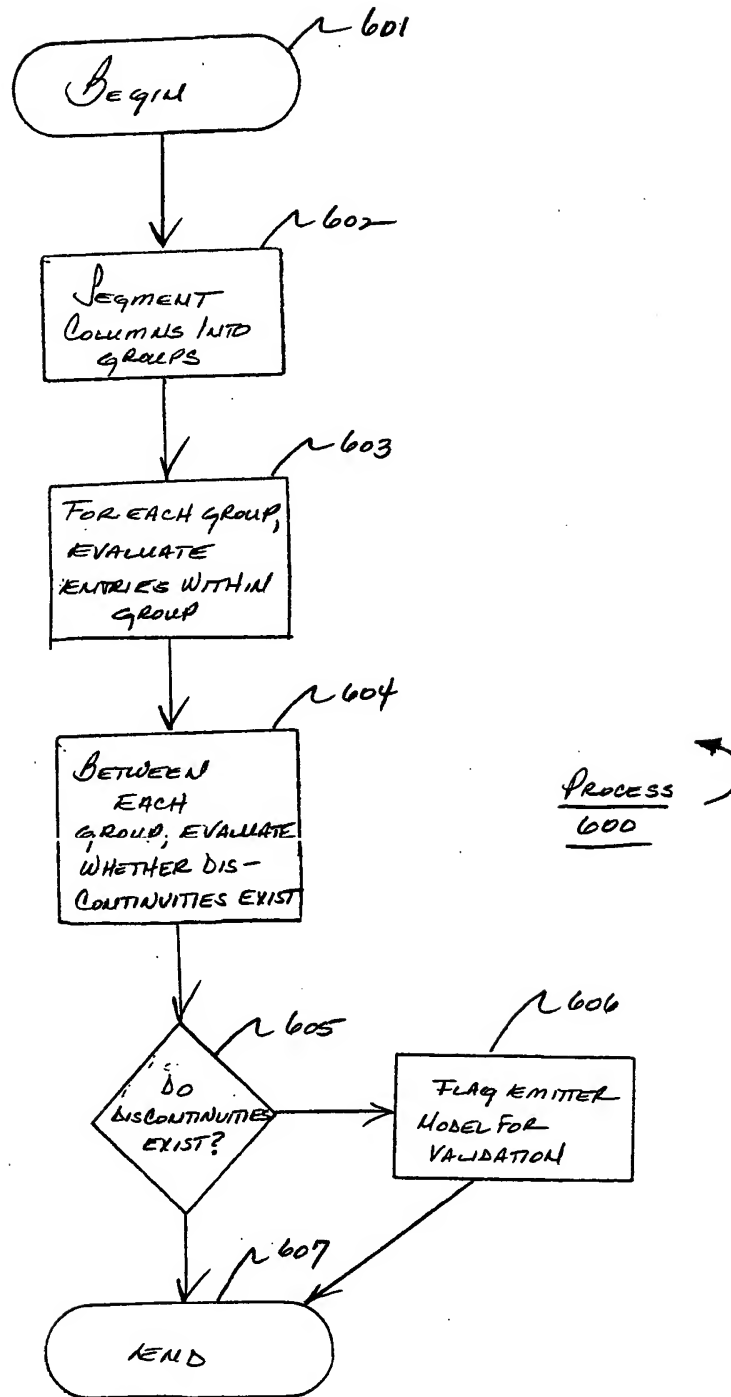


FIGURE 6

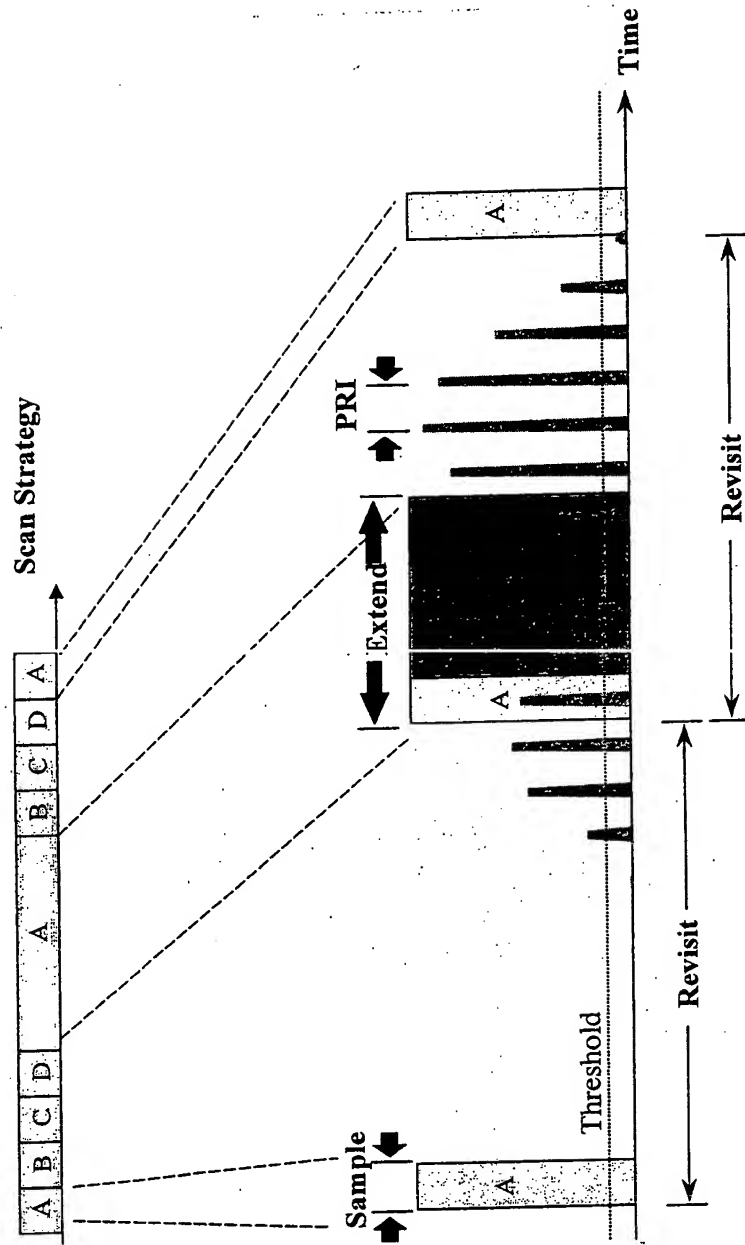


Figure 17

Figure 8A

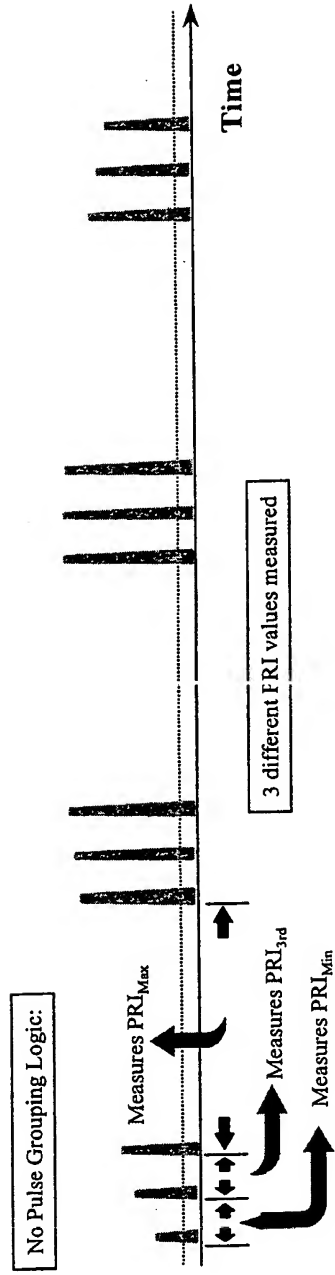
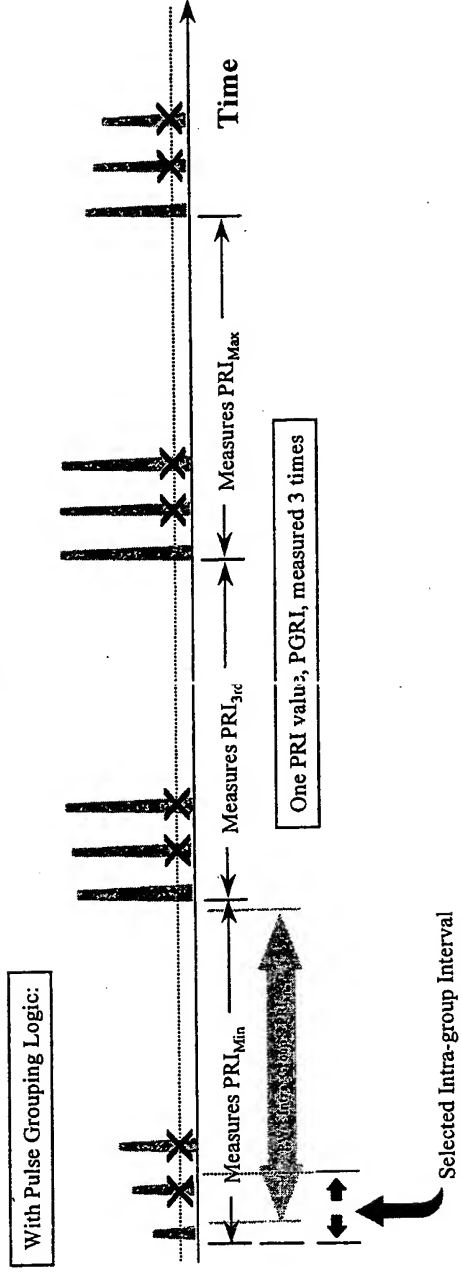


Figure 8B



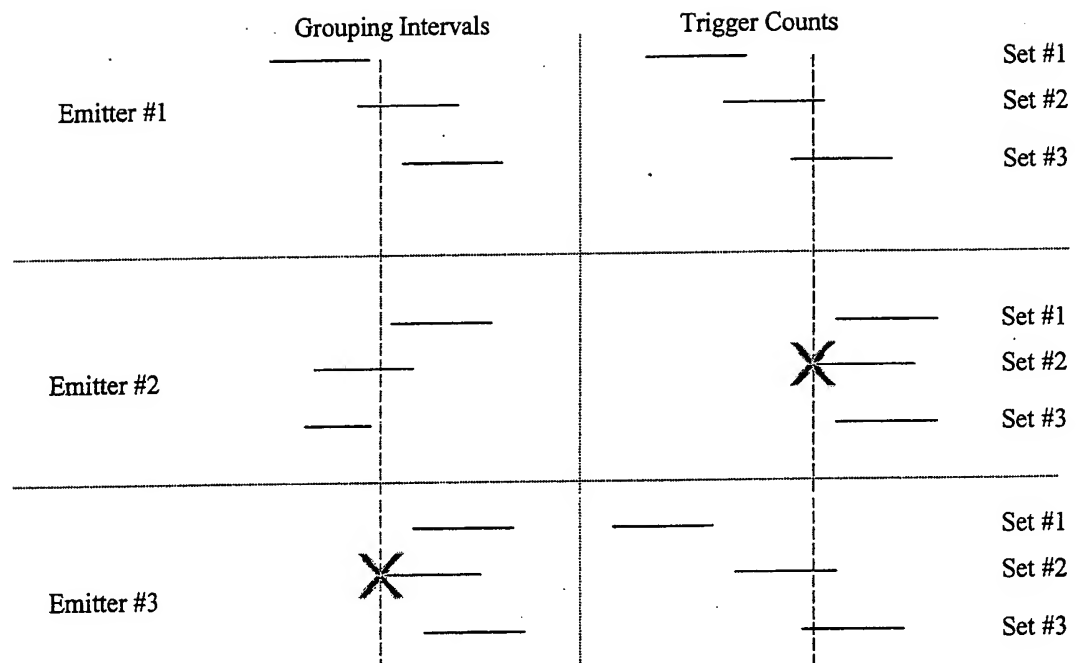
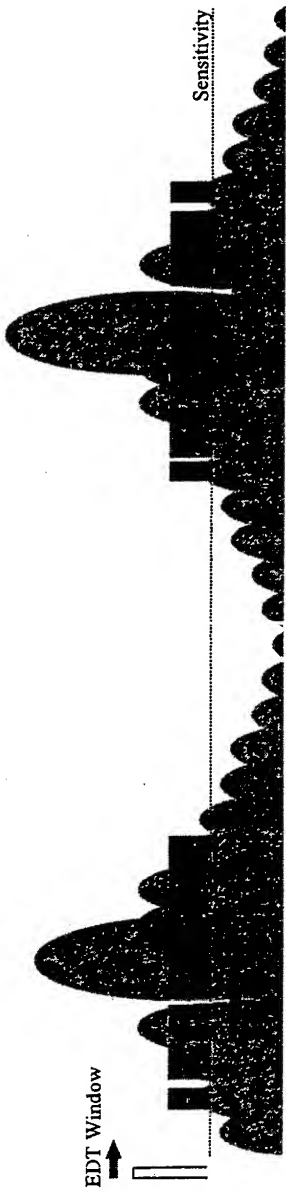


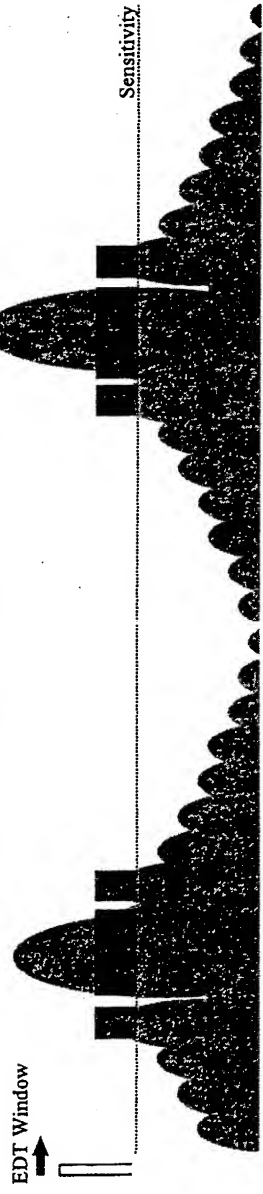
FIGURE 9

Figure 10A



Discrete Illuminations (TIBS)

Figure 10B



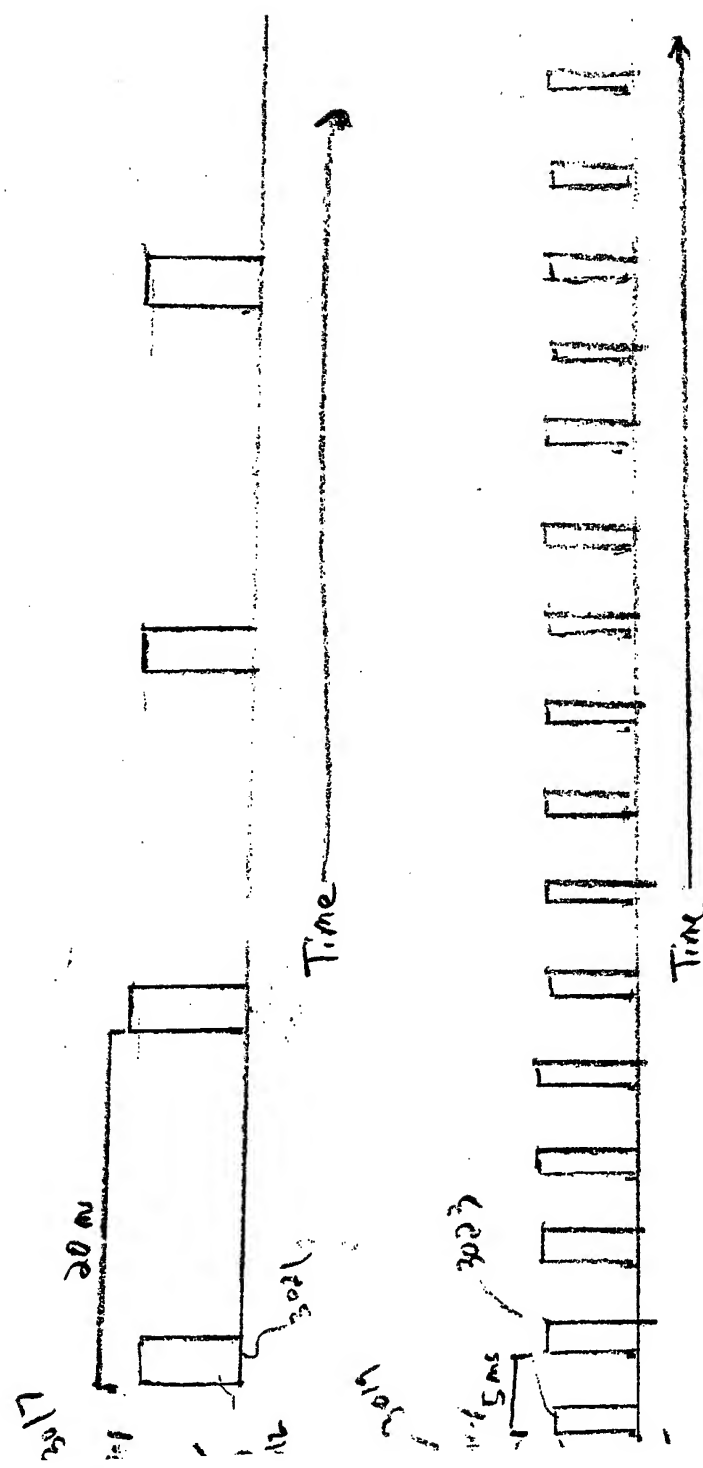
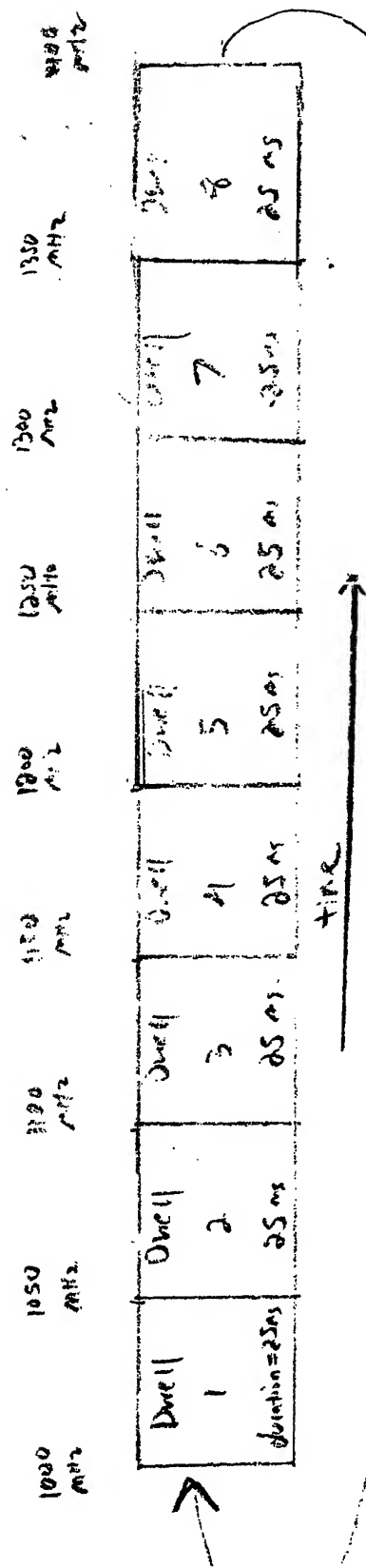
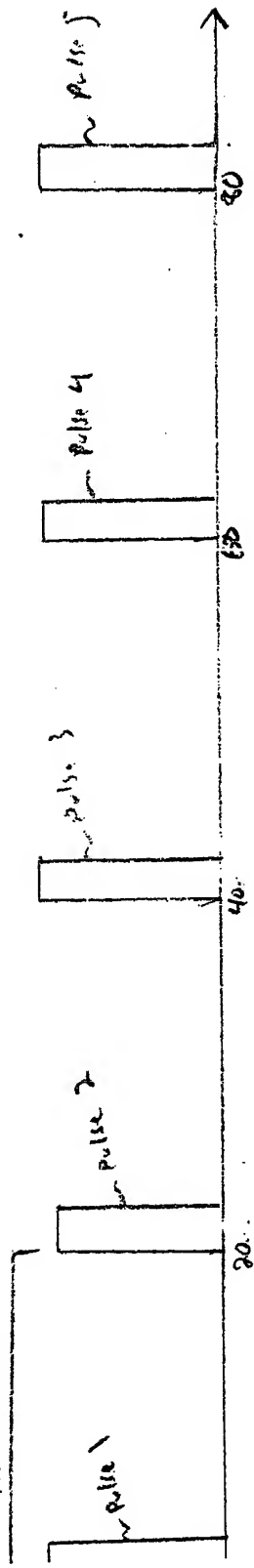


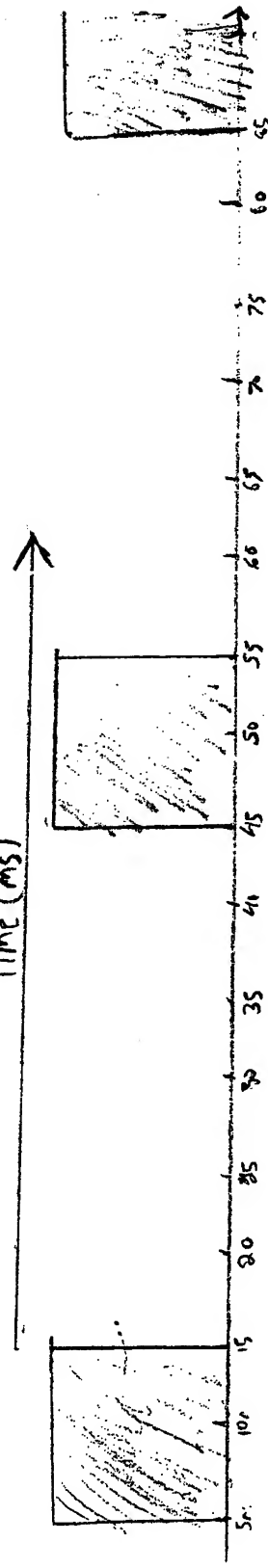
Figure 11

PRI = 20ms



Emitter 3101

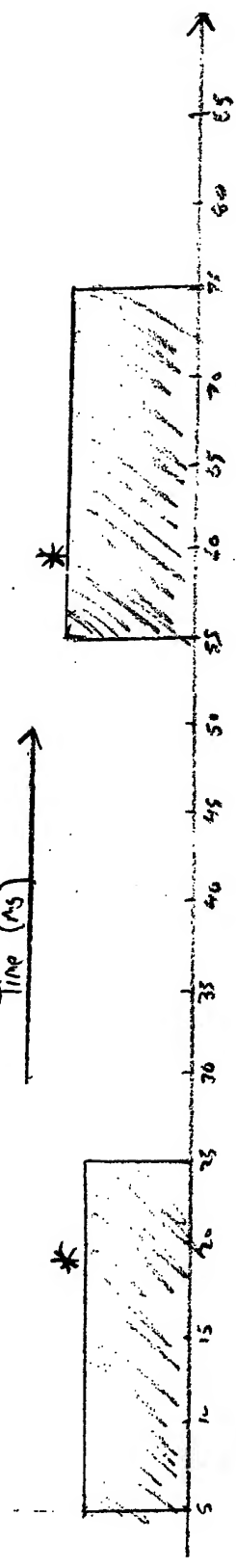
Time (ms)



Solution 1

Dwell Duration = 12ms
Revisit Time = 40ms

Time (ms)



Solution 2

Dwell Duration = 20ms
Revisit Time = 50ms

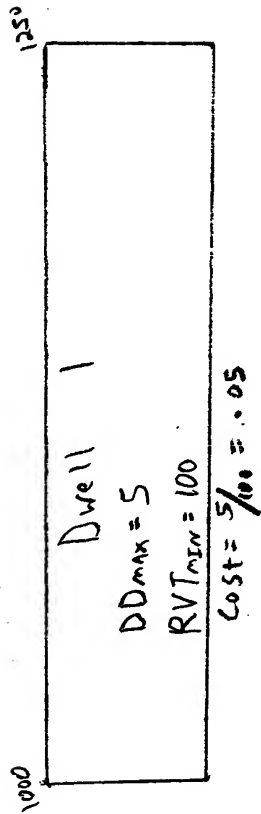
Time (ms)

Figure 12

4000

Emitter Name	Driving Amp 250 mV _{pk} IF 15 mV _{pk} VDD	Driving Amp 30 mV _{pk} IF 15 mV _{pk} VDD	RF Min (MHz)	RF Max (MHz)	Min MDT (ms)
E1	RV T 100 ns	RV T 650 ns	1000	1300	3
E2	RV T 120 ns	RV T 780 ns	1220	1350	5
E3	RV T 110 ns	RV T 330 ns	1510	1810	2
E4	RV T 130 ns	RV T 390 ns	1730	1860	4

Figure B



Solution 1

	1030	1060	1090	1120	1150	1180	1210	1240	1270
Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9	
DD_{max}	3	3	3	3	3	3	5	5	
RVT_{min}	650	650	650	650	650	650	650	650	
Cost	$3/650$	$3/650$	$3/650$	$3/650$	$3/650$	$3/650$	$5/650$	$5/650$	

Solution 2

Total
Cost

$$31/650 \approx .048$$

Figure 14A

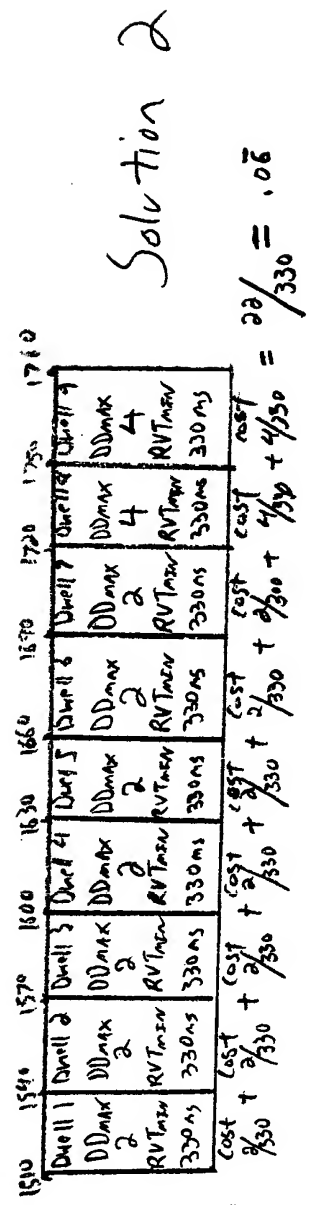
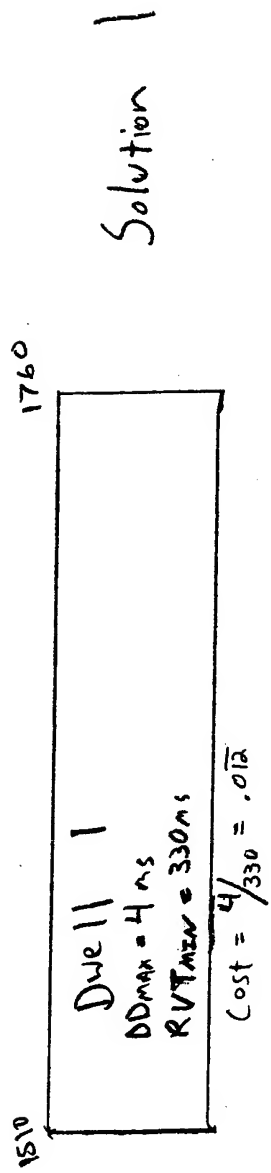


Figure 14B

Figure 15

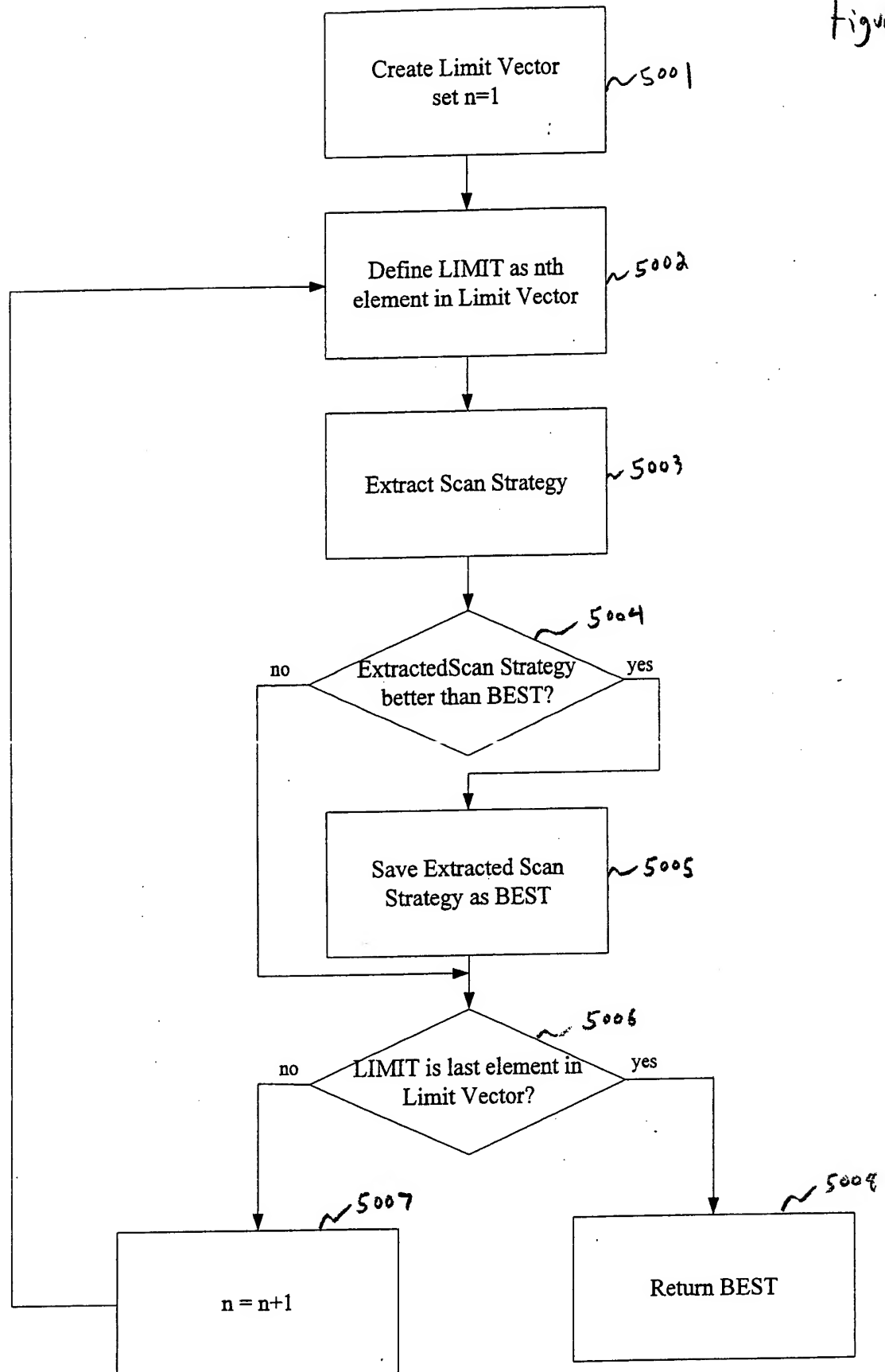
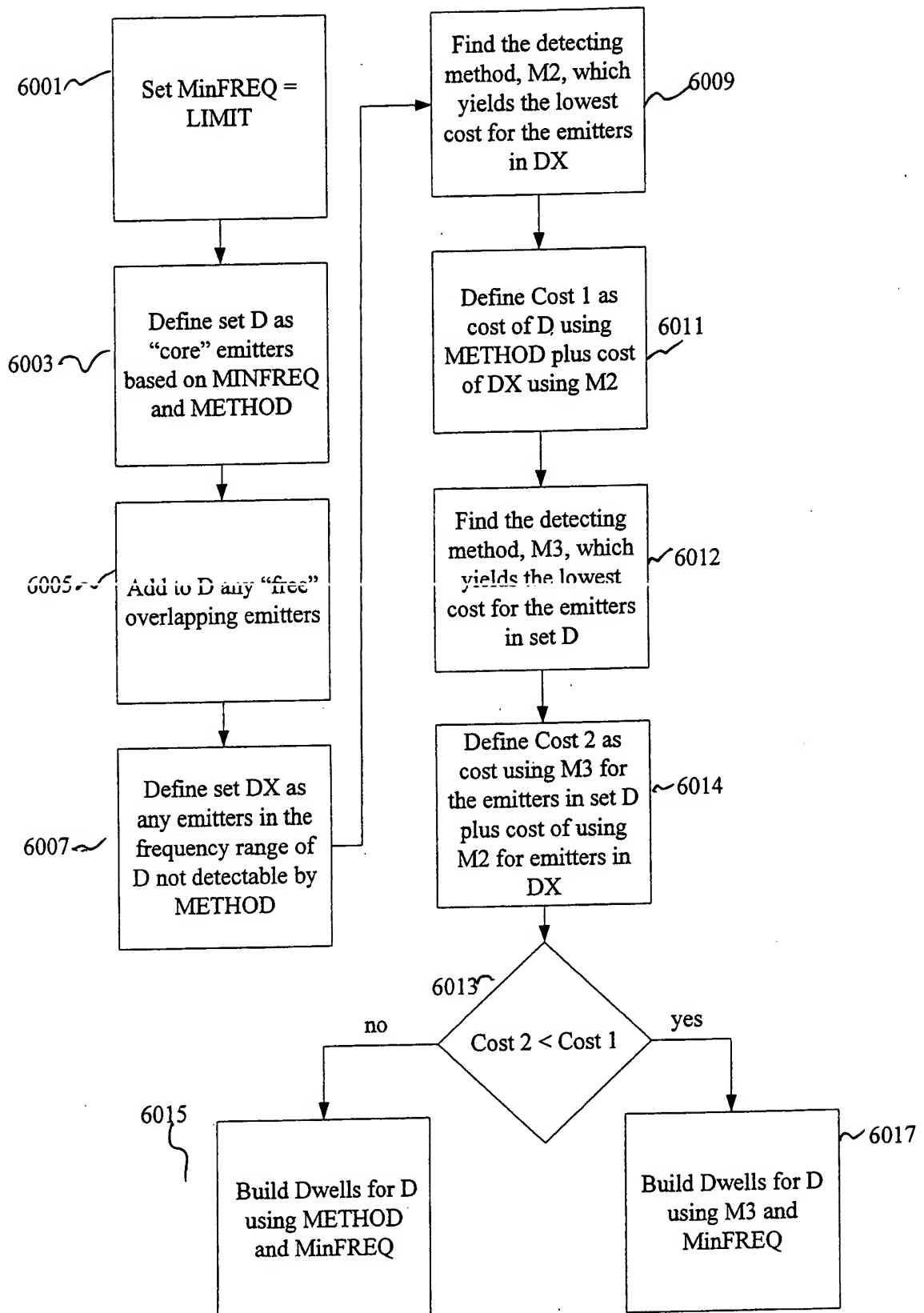


Figure 16



Name	RF Min	RF Max
E1	1100	1200
E2	1150	1250

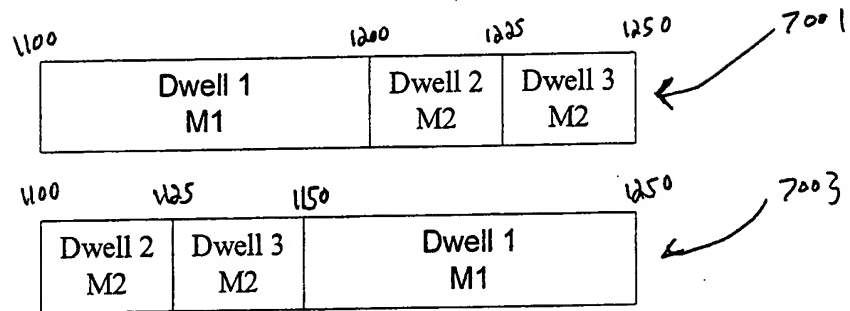
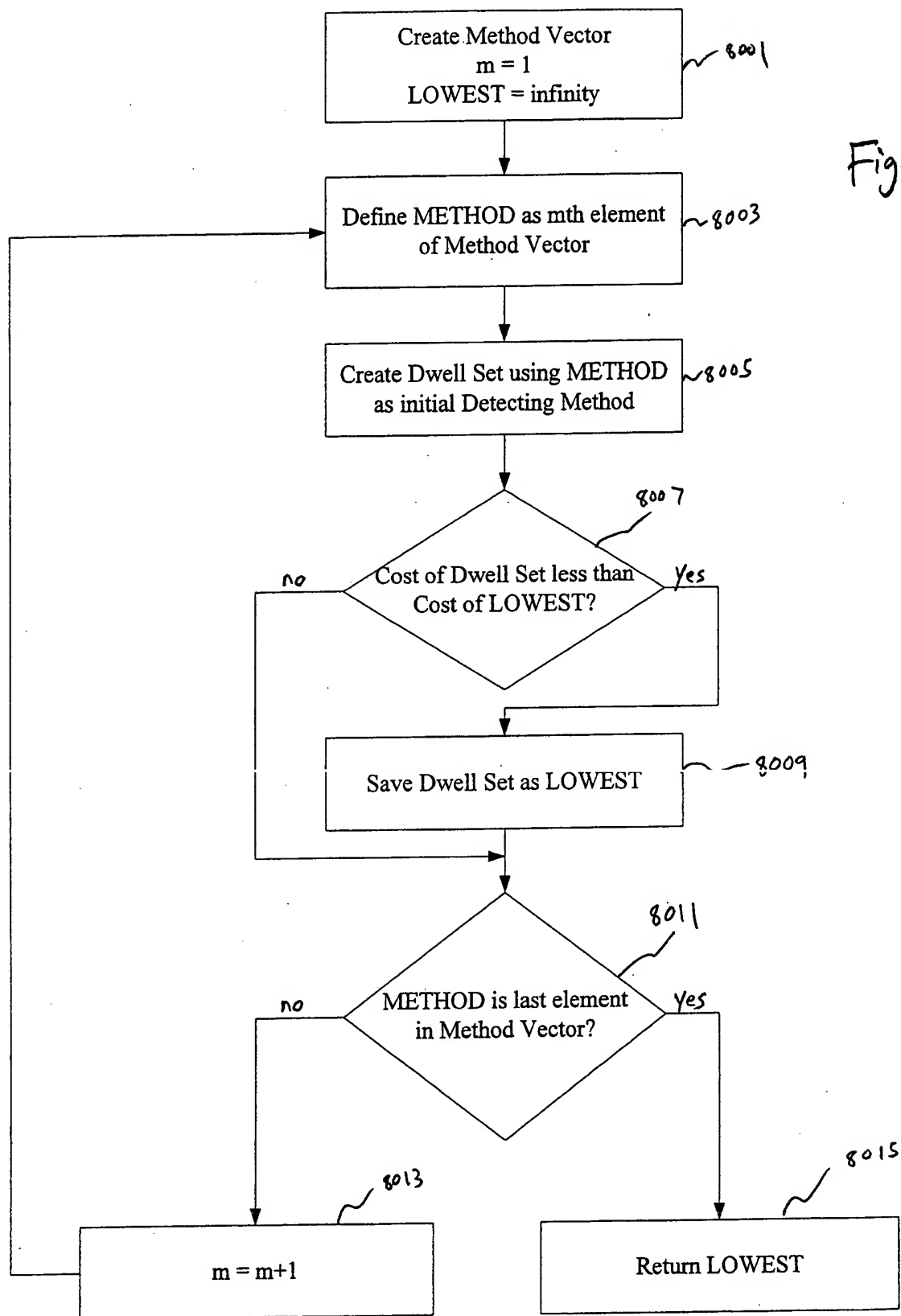


Figure 17

Figure 18



Emitter	Dwell Duration (ms)	Revisit Time (ms)
Emitter 1	1	500
Emitter 2	2	1200

Figure 19

Emitter	Dwell Duration (ms)	Revisit Time (ms)	Cost
Emitter 1	1	500	.002
Emitter 2	5	1000	.005

Figure 20

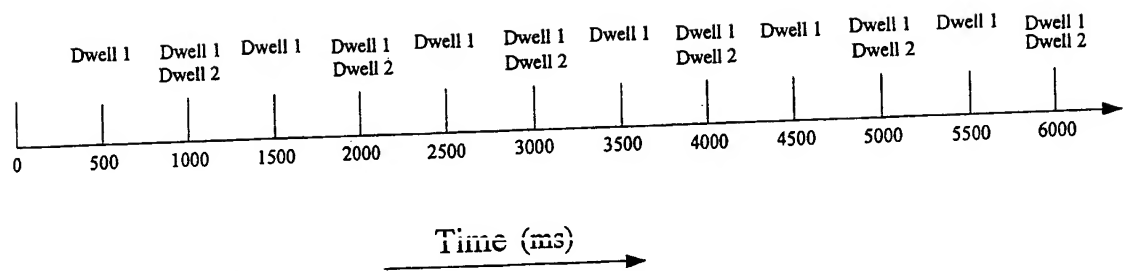
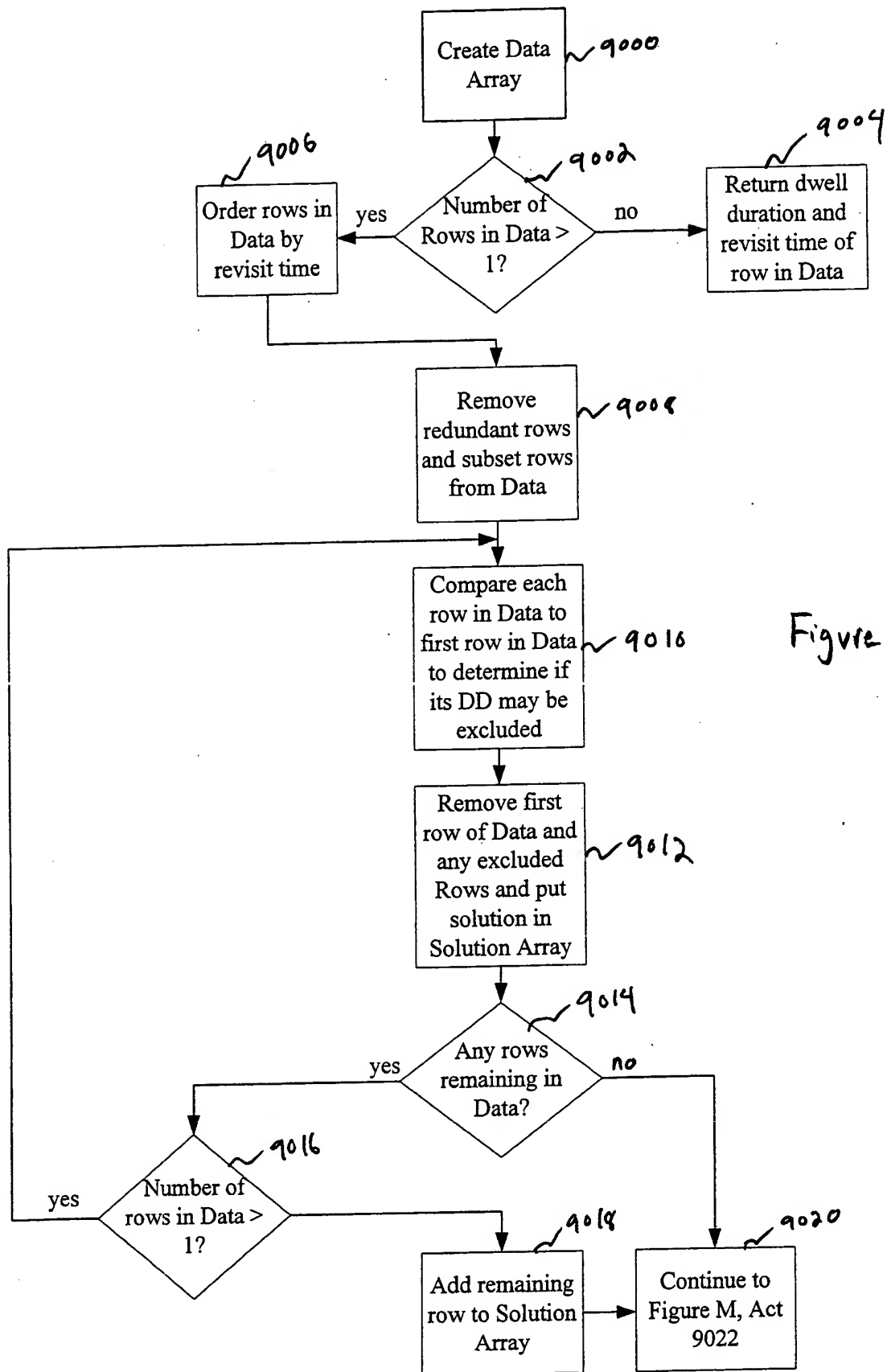


Figure 21



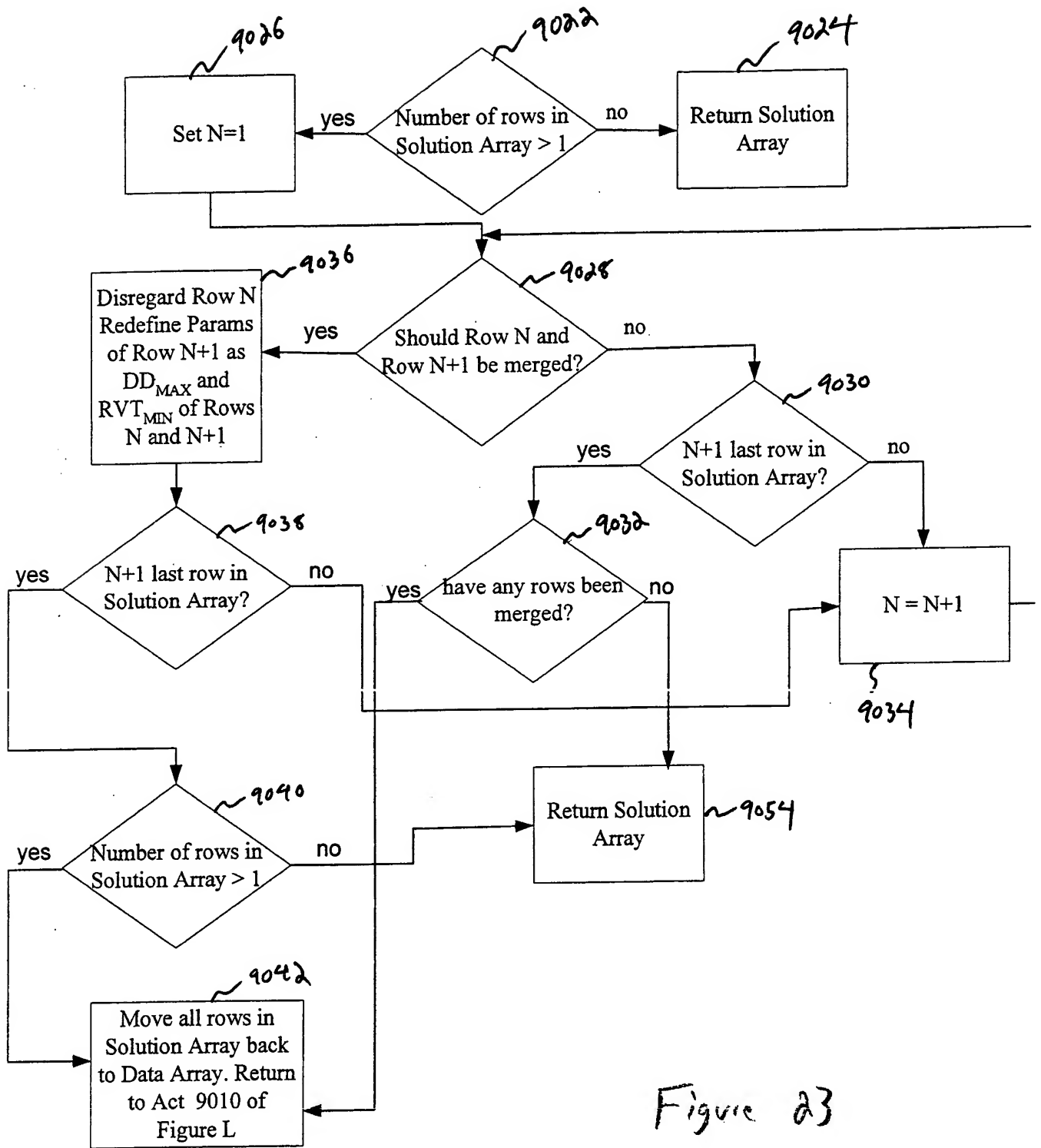


Figure 23

9044

Data		
MDT	EDT	RVT
3.05	17	2868
3	19	2000
3	19	2000
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000

Figure 24A

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000
3	19	2000
3	19	2000
3.05	17	2868

9048
~ 9049
~ 9050

Figure 24B

9051
9052

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
3	19	2000
3.05	17	2868

Figure 24C

~ 9044

Data		
MDT	EDT	RVT
2	9	700
2.3	11	800

~ 9046

Solution		
MDT	EDT	RVT
1	19	500

Figure 24D

~ 9044

Data		
MDT	EDT	RVT

9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24E

~ 9046

Solution		
MDT	EDT	RVT
1	19	500
2	11	700

Figure 24F

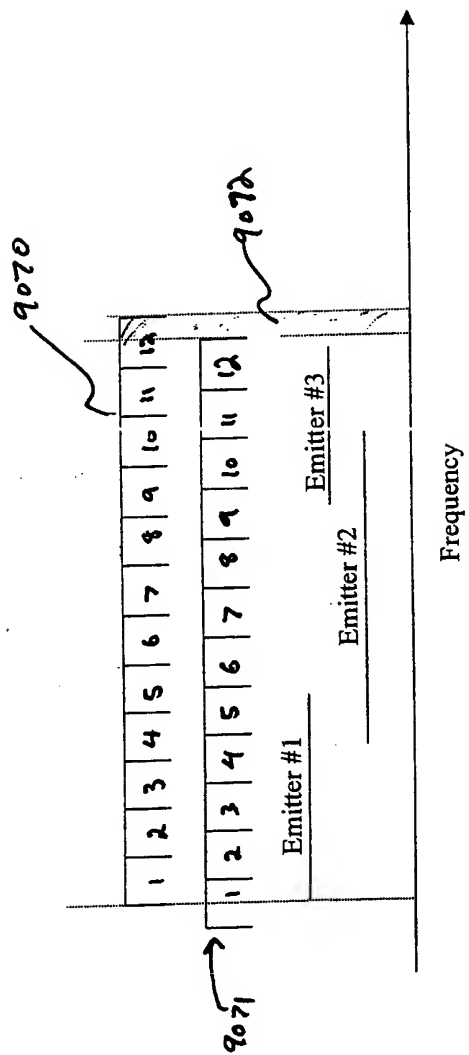


Figure 25

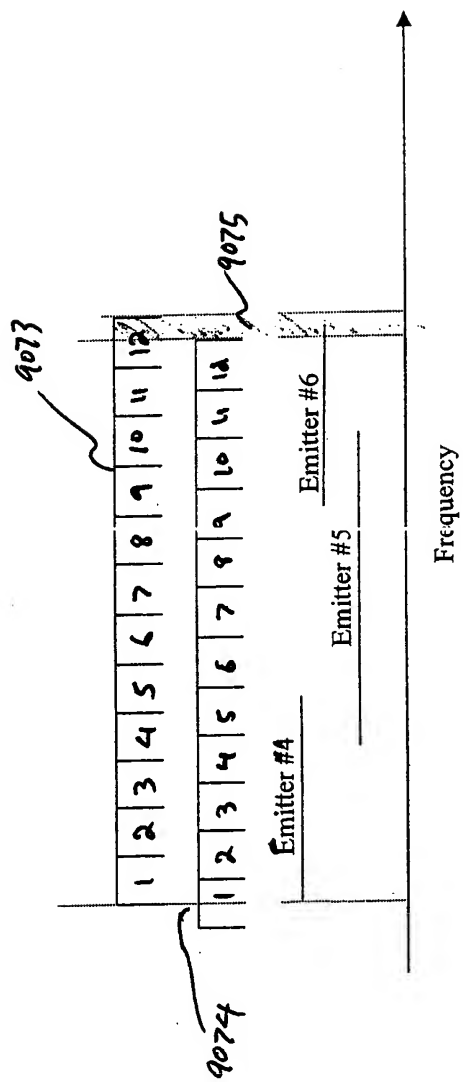


Figure 26

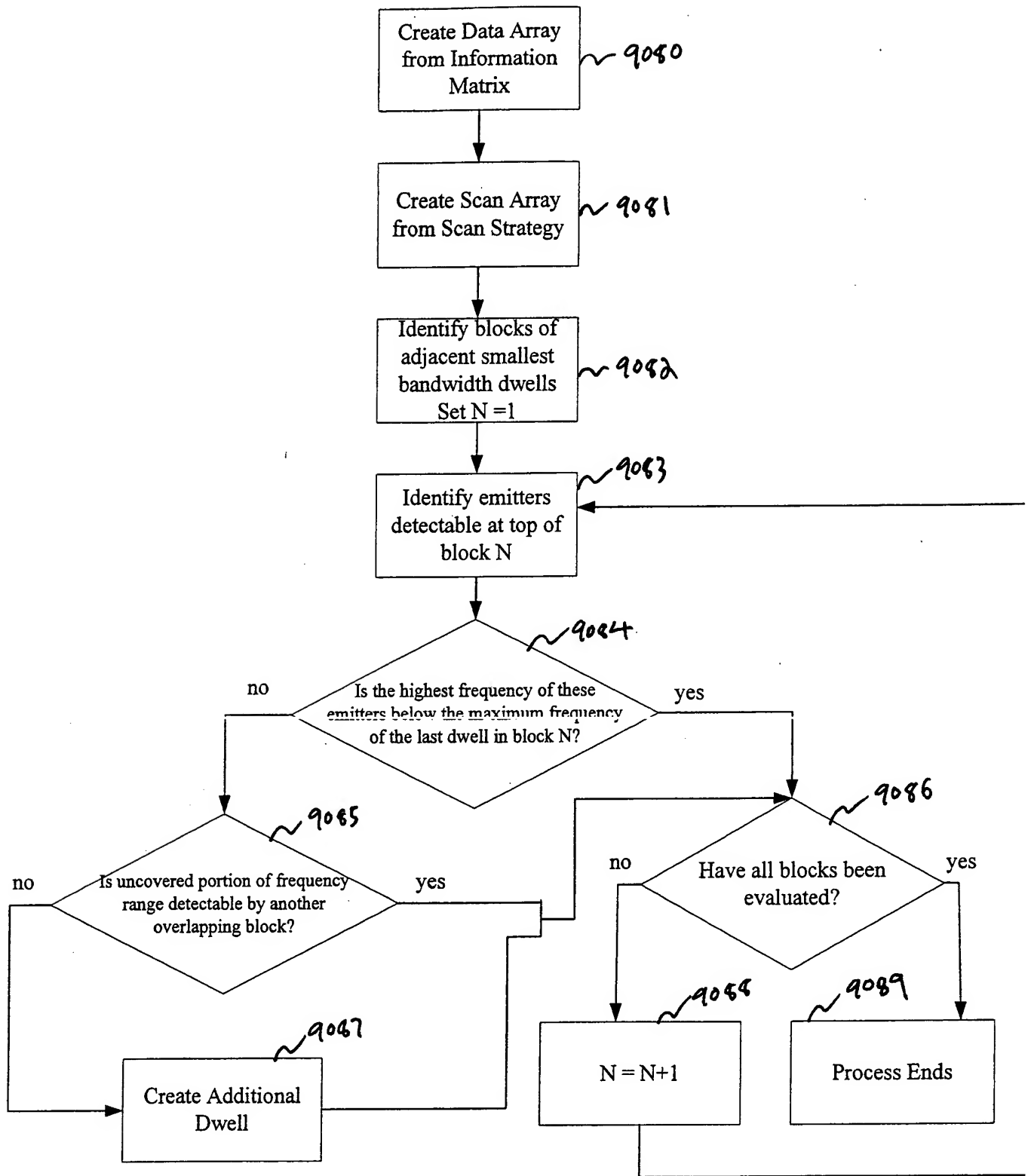


Figure 27

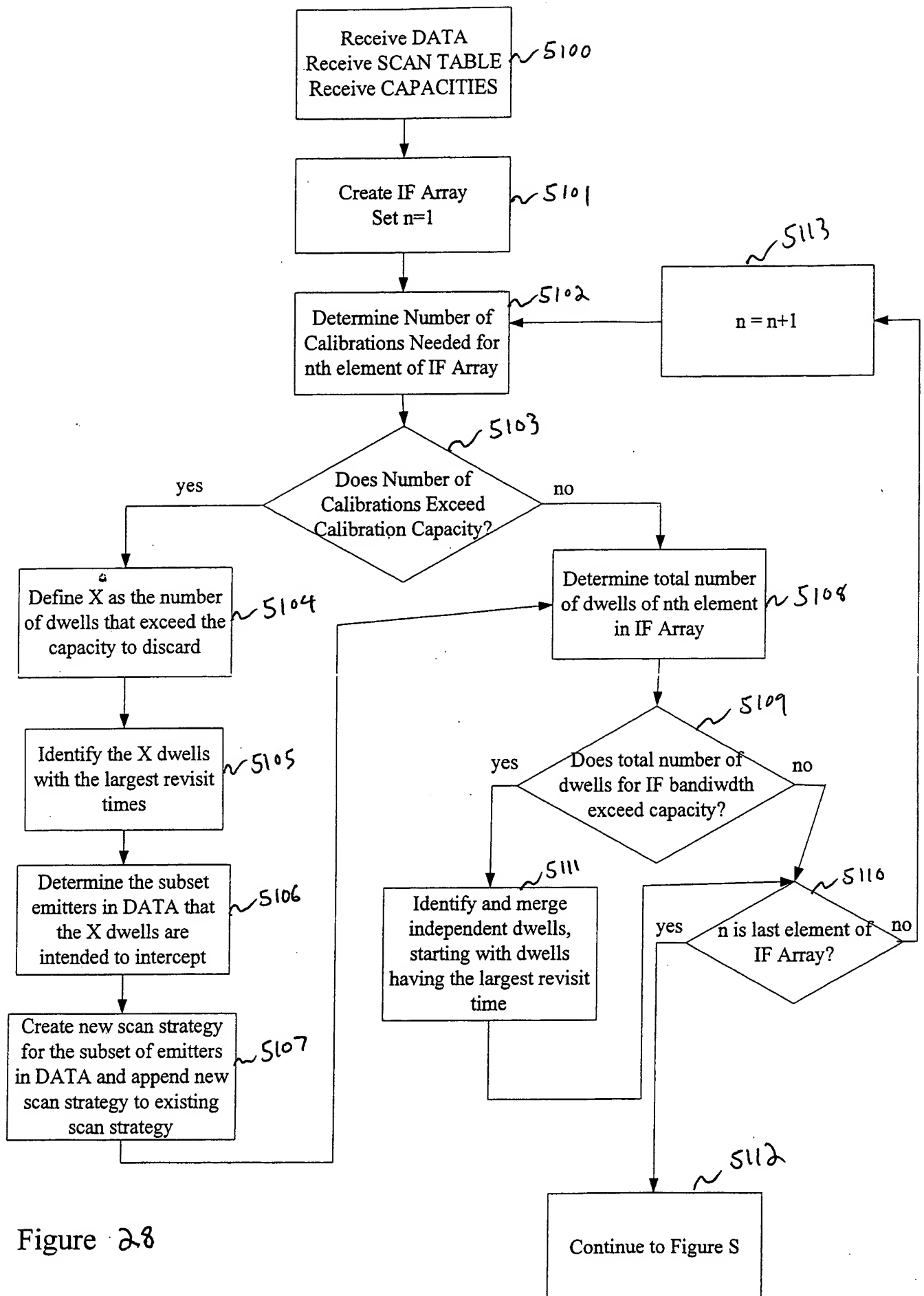


Figure 28

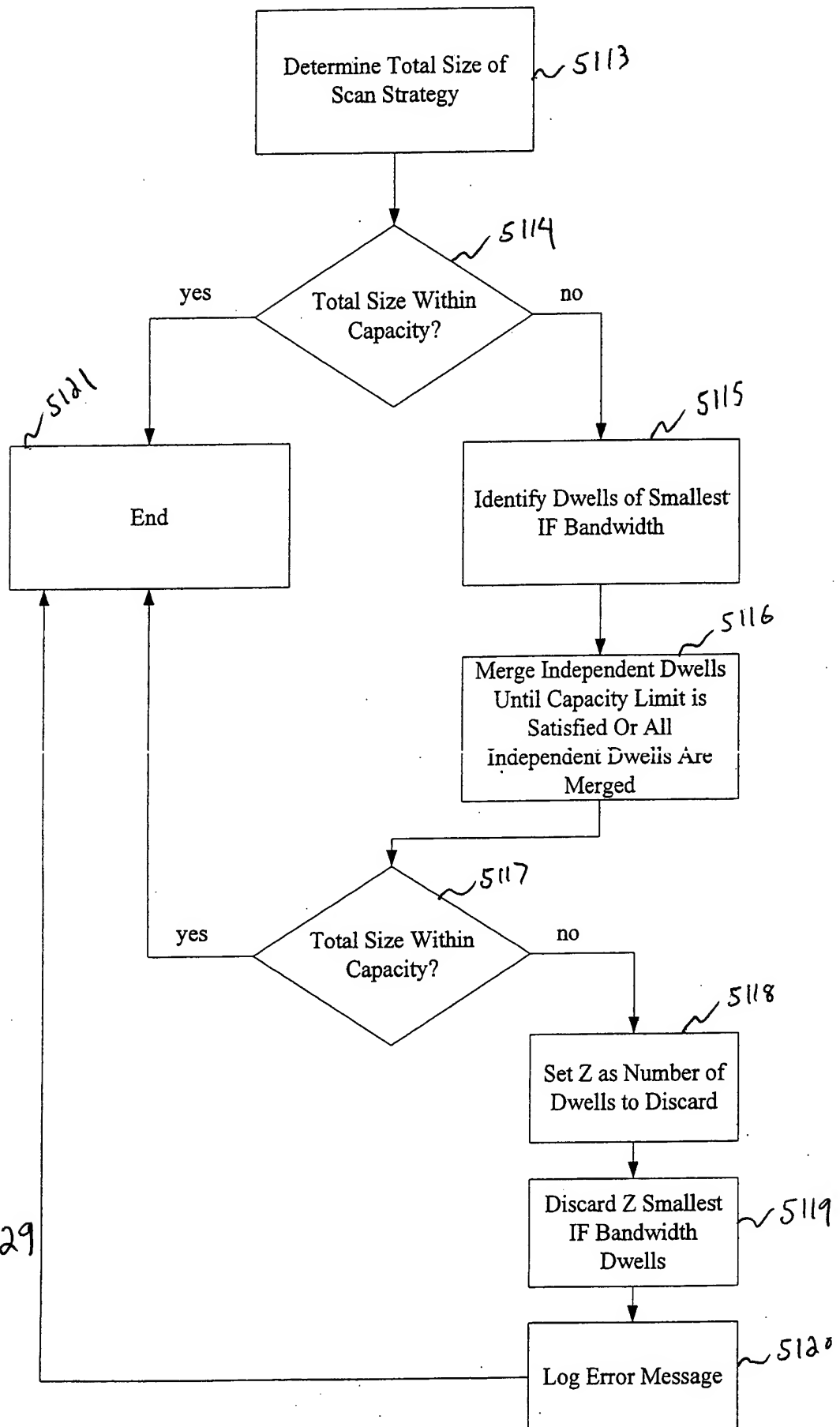


Figure 29

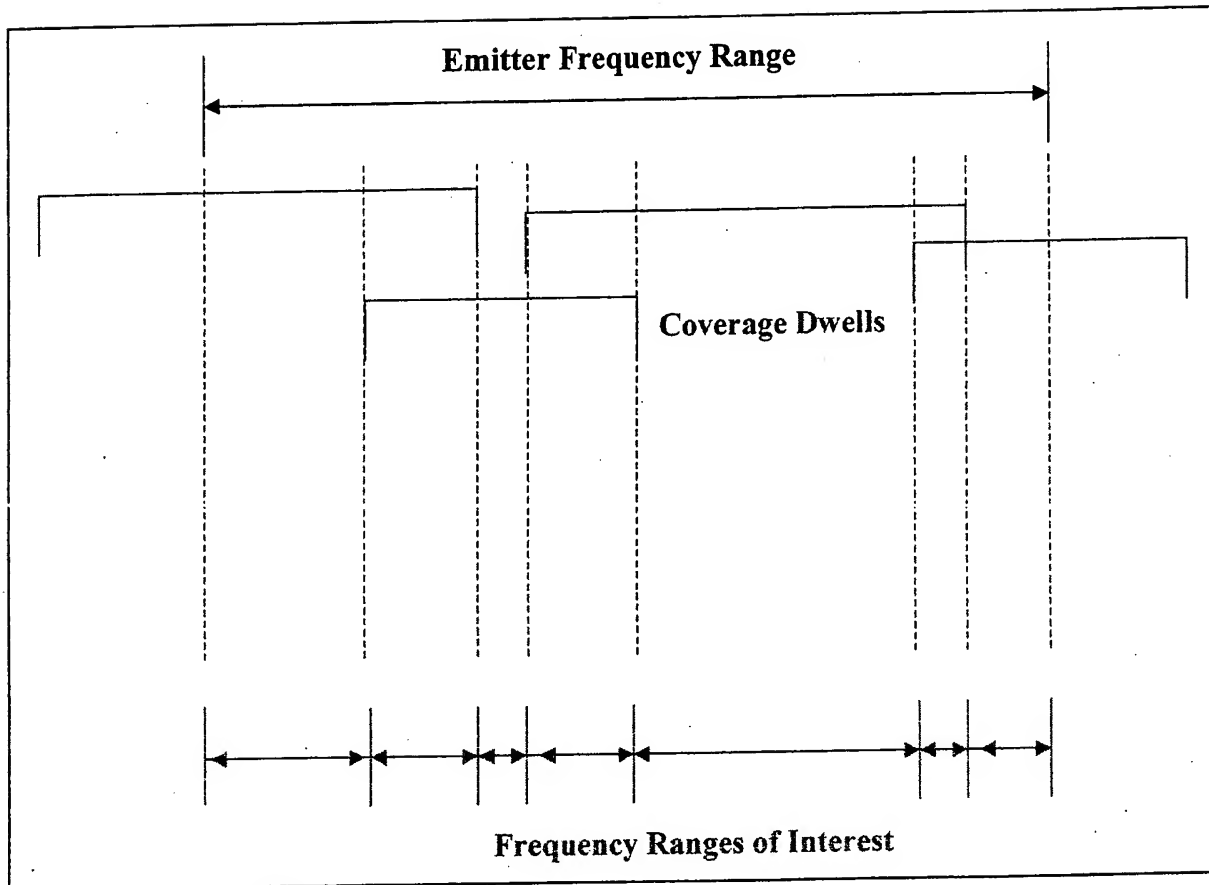


Figure 30

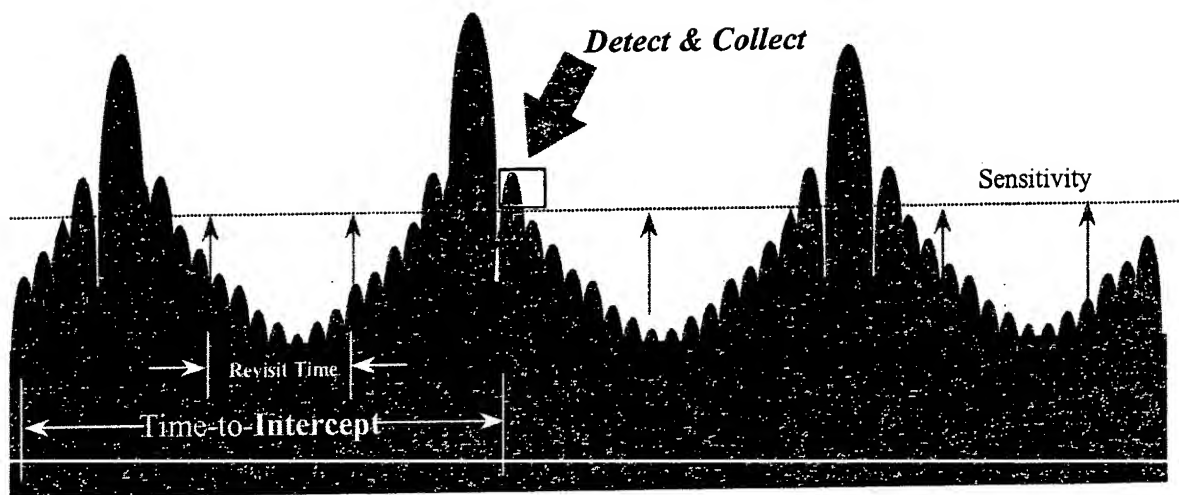


Figure 31

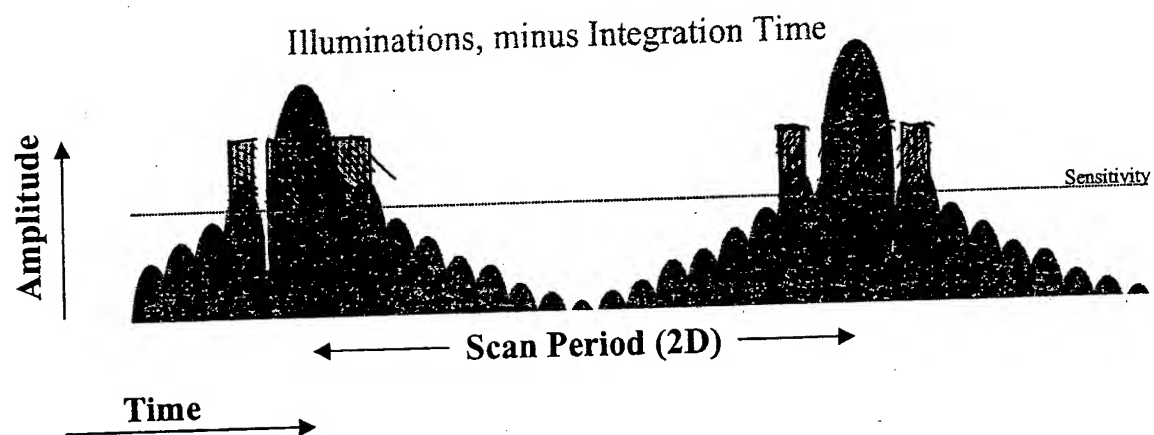


Figure 3d